

# Arnav Tiwari

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## EDUCATION

### IIT KHARAGPUR

B.TECH + M.TECH DUAL DEGREE

Mechanical Engineering

Computer Science (minor)

July 2017 - April 2022

## LINKS

Website:// [arnav-t.github.io](https://arnav-t.github.io)

GitHub:// [arnav-t](https://github.com/arnav-t)

LinkedIn:// [arnav-t](https://www.linkedin.com/in/arnav-t)

Hack The Box:// [avz7](https://0xdf.lambdastack.com/users/avz7)

## SKILLS

### PROGRAMMING

C, C++, Python, JavaScript, Bash

### WEB

HTML, CSS, Node.js, React, Flask,  
WebRTC

### DATABASES

MySQL, PostgreSQL, MongoDB

### TOOLS

Git, Linux, Docker, Kubernetes, Terraform

### CLOUD

Google Cloud Platform, Microsoft Azure

### OTHERS

DevOps, Cybersecurity, Agile

## COURSEWORK

• PROGRAMMING AND DATA  
STRUCTURES

• HIGH-PERFORMANCE PARALLEL  
PROGRAMMING

• COMPUTER ARCHITECTURE

• OPERATING SYSTEMS

• COMPUTER NETWORKS

## PUBLICATIONS

• NETWORK INTRUSION DETECTION  
USING PC-MTS APPROACH  
IEEE Xplore, 2021

## CERTIFICATIONS

• APIS & MICROSERVICES  
freeCodeCamp

## EXPERIENCE

### HONEYWELL | SOFTWARE ENGINEERING INTERN

May 2021 - July 2021 | Bangalore, India

- Worked as a part of an Agile team to create a highly scalable (1000+ concurrent users) E2E analytics dashboard for IoT devices on Microsoft Azure.
- Developed the Node.js REST API, WebSocket server, and Azure services for data ingestion, processing, and storage.
- Created the CI/CD pipeline of the project for deployment on Azure Kubernetes Service and Red Hat OpenShift cluster.

### THE LINUX FOUNDATION | LFX MENTORSHIP (MOJA.GLOBAL)

March 2021 - May 2021

- Designed and developed an end-to-end cloud-based SaaS solution on Google Cloud for The Full Lands INtegration Tool (FLINT), a platform for estimating greenhouse gas emissions at local, national, and global scales.
- Built a framework for the rapid and economical deployment of FLINT implementations on Google Cloud. Project is on track to be adopted by the governments of 3 countries.

### GOOGLE SUMMER OF CODE | STUDENT DEVELOPER AT MATRIX

May 2020 - September 2020

- Developed a highly customizable and lightweight React based embedded Matrix messaging client from scratch.
- The project was used by 2 large virtual conferences - CommCon UK 2020 and KDE Academy 2020 conference.
- Handled the client interactions to adapt the project, incorporate feature requests and ease the integration and deployment into large-scale production environments for various clients.

### HACKERRANK | SOFTWARE ENGINEERING INTERN

May 2019 - July 2019 | Bangalore, India

- Worked on optimizing the MySQL production database and the Ruby on Rails backend of HRW.
- Developed the Node.js framework for Role-Based Assessment tests and wrote unit tests for it.
- Detected and fixed various security vulnerabilities on hackerrank.com and associated websites.

## PROJECTS

### RIOT EMBEDDED | EMBEDDED MATRIX MESSAGING CLIENT

2020

Creator and Project Maintainer. Repo Link: [riot-embedded](https://github.com/arnav-t/riot-embedded)

Embedded Matrix chat client built in React for static websites.

### OSS | PASSION PROJECTS AND OTHER OPEN-SOURCE CONTRIBUTIONS

2015 - Present

Contributed to, authored, or maintaining over 50 other projects on GitHub.

## EXTRACURRICULAR ACTIVITIES

2018 - 2020 Executive Head of Kharagpur Open Source Society (KOSS)

2017 - 2018 Member at Autonomous Ground Vehicle research group, IIT Kharagpur

2017 - 2018 Member of Robotix Society, IIT Kharagpur